2. **Project Title:** Liberty Island Acquisition

Contract No. 98-AA-20-16270

CALFED No. 97-B03 POC: Howard Stark

CALFED Recommended Level of Funding:	\$8,926,000
Funds Obligated Through December 31, 1999	\$8,747,000
Funds Expended Through December 31, 1999:	\$8,715,582

Funding provided to: USBR agreement signed with USFWS on March 20, 1998 **Project Description:** Funding for this project will cover the full acquisition costs for the purchase of Liberty Island, approximately 4,760 acres. The island is strategically located in the north Delta at the southern end of the Yolo Bypass. The acquisition and eventual restoration will provide potential wetland, shaded riverine aquatic and instream habitat for winter-run chinook salmon, Delta smelt, splittail and other species.

Completion Date: January 30, 2000

First Quarter Accomplishments: This grant was amended to complete the planning process, allow the Service to enter into a Coopertive Agreement with the Trust for Public Land (TPL) and defray Service and TPL's indirect costs for this project. The revised grant total is \$8,926,000. The planning process is in its final stage and should be completed by the end of January, 2000. The Service intends to complete this acquisition by the end of February, 2000.

12. **Project Title:** San Joaquin Floodplain Acquisition and Riparian Restoration <u>SEE</u> <u>UPDATE SUBMITTED BY SUE LACKEY/PORTLAND BUDGET</u> <u>OFFICE/REALTY</u>

Contract No: 98-AA-20-16180

CALFED No. POC: Scott Frazer

CALFED Recommended Level of Funding:	\$10,947,000
Funds Obligated Through September 30, 1999	\$10,647,000
Funds Expended Through September 30, 1999:	\$1,831,129

Funding provided to: USBR agreement signed with USFWS on March 11, 1998 **Project Description:** This project consists of acquisition, preservation and restoration of 6,169 acres of fish and wildlife habitat along the San Joaquin River floodplain for the San Joaquin River National Wildlife Refuge, which will provide benefits to migratory birds and other bird species, splittail and San Joaquin fall-run chinook salmon. The project will provide increased flood protection through widening the floodplain and transient storage of floodwaters. USFWS is combining Bay-Delta Act funding with funds from NRCS's Emergency Watershed Protection Program (\$5,000,000) and USFWS's Emergency Supplemental Appropriation (\$5,000,000). **Completion Date:** December 31, 2000

Fourth Quarter Accomplishments: To date, 3,231 acres have been acquired of which the 2,030.43 acre Hagemann property was partially funded with Bay-Delta Act funds (\$1,558,854). Progress has been made on the hydraulic model, and a revised completion schedule has been devised. The new estimated completion date for the hydraulic model is now January 2000. A final report on the biological monitoring was prepared and submitted to CALFED. All remaining tasks are related to the acquisition of real property from willing sellers. Negotiations have begun with the landowners of the properties being considered.

Project Title: Bear Creek Floodplain Restoration Demonstration Project <u>SEE UPDATE</u> PROVIDED BY KAREN BROWN

Contract Number: 1425-98-AA-20-16220

POC:

CALFED Recommended Level of Funding:	\$334,000
Funds Obligated Through September 30, 1999	\$334,000
Funds Expended Through September 30, 1999:	\$331,408

Funding provided to: USBR agreement signed with USFWS on March 11, 1998 **Project Description:** This project involves development a the Unet hydraulic model has been completed and five-year return flow mapping reviewed. The available data suggest a need to review the scope of work and possibly revise the project alternatives. It appeared that several alternatives that were previously considered not viable should receive further consideration given the model results about water elevations at specific sites. A meeting with stakeholders has been scheduled to review progress and consider revisions to the project, including changes to the schedule and completion of a feasibility analysis for restoring floodplain functions along the San Joaquin River and Bear Creek on public lands to provide flood protection benefits, enhance shaded riverine aquatic habitat and wetlands and improve instream habitat for the San Luis National Wildlife Refuge Complex. Project studies will include geomorphic channel effects and floodplain hydraulics. Benefits are expected to accrue to migratory birds, San Joaquin fall-run chinook salmon and several other fish species, in addition to increased flood control benefits. Completion Date: January 30, 2000

Fourth Quarter Accomplishments: The Unet hydraulic model has been completed and 5-year return flow mapping reviewed. The available data suggests a need to review the scope of work and possibly revise the project alternatives. It appeared that several alternatives that were previously considered not viable should receive further consideration given the model results about water elevations at specific sites. A meeting with stakeholders has been scheduled to review progress and consider revisions to the project, including changes to the schedule.

CALIFORNIA BAY DELTA ENVIRONMENTAL ENHANCEMENT ACT

INDIVIDUAL PROJECT PROGRESS REPORT As of: 12/31/99

Agency: United States Geological Survey

Proposal/Description: Assessment of the Sacramento-San Joaquin River Delta as Habitat for

Production of the Food Resources that Support Fish Recruitment

Funds Provided: \$1,440,649 76% of the Total Funds Provided

Funds Obligated: \$1,077,952 20% of the Total Funds Provided

Funds Expended: **\$294,022**

Labor: \$135,361

Contracts (AE): \$809,712

Contracts (Const):

Overhead: \$109,429

Other: \$40,158

Total: \$1,094,660

Accomplishments during the quarter:

Task 2 (USGS):

Our project team successfully completed a 9-site Delta cruise (Oct 12-15) during the previous quarter. Sampling sites were: Cutoff Slough (north of Grizzly Bay), Sacramento River at Hood, San Joaquin River at Mossdale, San Joaquin River at Twitchell Island, Little Holland Tract, Sac. River at Rio Vista, Franks Tract, Mildred Island, and X2. Similar to previous cruises, we sampled three locations at each of the sites mentioned above in order to account for potential spatial variation. We measured concentrations of chla, POC, DOC, SPM, and DIC at all sites. In addition, we conducted short term (1 day) and long term (21 days) bioassays to evaluate the lability and potential lability of both POC and DOC. These assays examined organic carbon loss and dissolved oxygen loss through time and will allow us to partition the relative contributions of POC and DOC to microbial metabolism. In conjunction with the bioassays described, we measured bacterial productivity (3H-leucine incorporation) in unfiltered samples (DOC + POC) and filtered samples (DOC only) during brief 1 hour incubations to examine variation in bacterial cell production among sampling locations.

Additional field work examined small-scale spatial variability in chla, SPM, and dissolved oxygen throughout Franks Tract and Mildred Island. This intense 1-day cruise served as a follow-up to the spatial mapping project that was executed in June at these sites during spring and neap tidal cycles. Similar to the June cruises, water quality variables were measured continuously along a predetermined circuit and discreet water samples were taken at fixed locations to help calibrate on-board instrumentation. In addition, DOC samples were taken at all fixed sampling locations to examine the extent of co-variation with chla. Unlike the previous cruises, vertical variation was examined at numerous fixed locations, thus allowing 3-dimensional spatial models to be constructed.

Much of our time this quarter was dedicated to processing, analyzing, and organizing all field samples from the 1999 field season.

Task 3 (VIMS):

In the past quarter, we have been working primarily on analyzing samples for sterols and fatty acids, proteins, and sediment bulk parameters. The emphasis this quarter was on lab work rather than data quantification and analysis. We also participated in the October 1999 cruise. Elemental analyses (C, N) were completed for surface sediments collected in July and October 1999, and sediment samples were also prepped for stable isotope analyses. All suspended particle samples through May 1999 have now been analyzed for total proteins. Suspended particle samples for the July and October 1999 will be analyzed for total protein in the next two weeks. We have also started running lipid samples in time series for each site, rather than running samples by cruise date. This strategy will allow us to obtain seasonal biomarker data for specific sites more quickly, in particular control and tract sites. Suspended particle samples for Cutoff Slough from January through October 1999 were analyzed for total lipid extract (TLE), sterols and fatty acids. Quantification is not complete at this time. Suspended particle samples for Mildred Island and Franks Tract from January to October 1999 are to be analyzed next for lipid biomarkers.

It was decided following our September meeting that we would limit our sediment sampling to the control (Cutoff Slough) and tract sites (Franks Tract, Mildred Island, Little Holland Tract) beginning with the October 1999 cruise. Sediment samples from other sites yield TOC/TN values under 1% OC/dry weight, presenting an analytical challenge. In our most recent analyses, we found that TOC/TN content remained constant at Cutoff Slough, while it generally increased for the tract sites between July and October. In Mildred Island, samples were collected from three different sites within the lake, and indicated spatial variability in OC for sediments. Values ranged from 3.37±0.05% OC for MI-2, 6.12±0.28% OC for MI-East Cove to 9.01±0.34% OC for MI-South East.

The next quarter will be devoted primarily to running samples for lipid biomarkers, total proteins and carbohydrates for sediments and suspended particles, participating in CALFED cruises, and further data analysis.

Task 4 (UCD):

This quarter the UCD zooplankton team participated in the comprehensive sampling trip in October and conducted fall zooplankton growth assays with water from the Sacramento River at Rio Vista, the San Joaquin River at Twitchell Island, flooded Mildred Island, Suisun Slough near Suisun City and Cut-off Slough. Daphnia growth rates were lower than in spring and summer, but in general followed previously observed patterns. During the comprehensive sampling trip we collected zooplankton stable isotope and fatty acid samples, as well as samples for particulate phosphorus analysis. For quality assurance, we completed a literature review and laboratory testing of methods for measuring total and particulate phosphorus in aquatic systems. In September, we presented our preliminary findings at the project group meeting in Menlo Park.

Task 5 (USGS and Stanford):

This quarter we calibrated and verified Delta TRIM in the three dimensional hydrody namic mode. We now have the capability to resolve velocity vectors at a 2 m vertical resolution throughout Suisun Bay and the Delta. In addition, we are accounting for the baroclinic forces in the three dimensional version of model. This gives us the capability to look at the influence of gravitational circulation on mixing in the Delta. In order to evaluate how well the model represents the system, we successfully used the model to predict the location of X2. We are currently running this same simulation for the three dimensional with a baroclinic forcing model.

Several simulations are being planned for next quarter:

First, we will use Delta TRIM to simulate a time period February, 1999. With this period we hope to show the influence of Delta Outflow on the location of X2. We will also look to see if the two-dimensional, three-dimensional without baroclinic forcing, or the three-dimensional with baroclinic forcing best predicts the location of X2. This time period coincides with a field sampling cruise done by other team members and will aid Delta-cruise data interpretation.

Second, we will be using "numerical drogues" to quantify residual velocities in the region near Three Mile Slough, and the confluence of the Sacramento and the San Joaquin near Sherman Island. This will help describe the dispersion occurring at these junctions due to tidal influences.

Third, the November and December 1999 time period will be modeled in order to identify the factors which caused a sharp increase in Delta salinity when the Delta Cross Channel was closed. As part of this study we will be filtering velocities, stages, and flows to look at the filling and emptying of the Delta during the fortnightly spring-neap tidal cycle. We want to see how tidal friction and tidal waves influence this phenomena.

Lastly, we will be using the model to quantify the residence time in Franks Tract and Milred Island. Will will also be running simulations which can predict the sources of water and several sampling locations within the Delta.

CALIFORNIA BAY DELTA ENVIRONMENTAL ENHANCEMENT ACT

Integrated Pest Management Project Quarterly Report #6 Covering the Period from 10/1/99 through 12/31/99

Date of this Report: 1/13/00

Contract Number: Cooperative Agreement 1425-98-FC-20-17300 CALFED Number: Proposal

B236

Contract Agency: Bureau of Reclamation

Contractor: Central Contra Costa Sanitary District (CCCSD)

Programmatic/Technical Contact: Harriette Heibel

Phone: (925) 229-7310 Fax: (925) 676-7211

Financial Contact: Debbie Hinkson Phone: (925) 229-7323. Fax: (925) 676-7211

Project Title: Integrated Pest Management Partnership to Improve Water Quality in Suisun Bay

and Local Creeks

Project Location: Central Contra Costa County

Term of the Contract: 9/1/98 8/31/2001
Initiation Date of Project Completion Date of Project

Description of the Project:

The project promotes Integrated Pest Management (IPM) and increases awareness about the water quality risks of pesticides as a way to reduce the presence of toxic pesticides in Suisun Bay and local creeks. It promotes IPM and raises community awareness about pesticide risks through expanding educational partnerships with stores and Master Gardeners; purchasing and promoting an educational video; expanding and publicizing IPM strategies used by public gardens; training pest control operators about IPM; and implementing an "eco-friendly" yard campaign.

Fiscal Reporting by Task: See table on the next page.

Total expenditure to date: \$194,774.89 **Total expenditure this quarter:** \$18,196.15

Total Billed during the Quarter (federal share of total): \$10,591.20

Cost broken out by Object Classification for this contract:

	Total project	Federal share	Federal share
	this quarter	this quarter	to date
Labor	\$ 6,502.40	\$3,784.77	\$27,134.40
Contracts (AE)	0	0	0
Contracts (Construction)	0	0	0
Overhead	\$ 1,979.95	\$1152.44	\$ 8,388.87
All other	\$ 9,713.80	\$5653.98	\$77,846.77

Objective(s) to be achieved: The overall project goal is to reduce the presence of toxic pesticides in Suisun Bay and local creeks. See page 7 for a description of benefits/objectives achieved during this quarter.

Fiscal Reporting To be completed when data is available

Fiscal Reporting To be completed when data is available							
	Budgeted/Approved for Funding	Invoiced/Billed to date	Remaining Balance				
Task 1 This contract Other (CCCSD) Subtotal Task 1	\$28,521	\$ 12,724.06	\$15,796.94				
	\$20,479	\$ 9,136.44	\$11,342.56				
	\$49,000	\$ 21,860.50	\$27,139.50				
Task 2 This contract Other (CCCSD) Subtotal Task 2	\$93,711	\$55,339.81	\$38,371.19				
	\$67,289	\$39,736.49	\$27,552.51				
	\$161,000	\$95,076.30	\$65,923.70				
Task 3 This contract Other (CCCSD) Subtotal Task 3	\$69,847	\$39,027.82	\$30,819.18				
	\$50,153	\$28,023.74	\$22,129.26				
	\$120,000	\$67,051.56	\$52,948.44				
Task 4 This contract Other (CCCSD) Subtotal Task 4	\$5,821	\$ 98.44	\$5,722.56				
	\$4,179	\$ 70.69	\$4,108.31				
	\$10,000	\$169.13	\$9,830.87				
Task 5 This contract Other (CCCSD) Subtotal Task 5	\$14,551	\$0	\$14,551				
	\$10,449	\$0	\$10,449				
	\$25,000	\$0	\$25,000				
Task 6 This contract Other (CCCSD) Subtotal Task 6	\$22,118	\$ 6,179.93	\$15,938.07				
	\$15,882	\$ 4,437.47	\$11,444.53				
	\$38,000	\$10,617.40	\$27,382.60				
Task 7 This contract Other (CCCSD) Subtotal Task 7	\$22,700	\$0	\$22,700				
	\$16,300	\$0	\$16,300				
	\$39,000	\$0	\$39,000				
Task 8 This contract Other (CCCSD) Subtotal Task 8	\$8,731	\$0	\$8,731				
	\$6,269	\$0	\$6,269				
	\$15,000	\$0	\$15,000				
Total Project This contract Other (CCCSD) Total	\$266,000	\$113,370.06	\$152,629.95				
	\$191,000	\$ 81,404.83	\$109,595.16				
	\$457,000	\$194,774.89	\$262,225.11				

Listing of each task (by title) and percentage complete:

The following percentages are based on the billing amount:

Task 1: Project Management: 45%

Task 2: Expand Partnerships with Stores: 59% Task 3: Partnership with Master Gardeners: 56%

Task 4: IPM video: 2%

Task 5: IPM Strategies Used by Public Gardens: 0% Task 6: IPM Training for Pest Control Operators: 28%

Task 7: "Eco-friendly" Yard Campaign: 0% Task 8: Data Monitoring and Evaluation: 0%

Completion of milestones/tasks/deliverables (status):

Task 1: Project Management

We completed the following with respect to project management:

- Prepared the fifth quarterly report.
- Prepared the CALFED Progress Report for the 7/1/99 9/30/99 quarter.
- Completed the first Annual Monitoring Report (which was submitted to the Bureau of Reclamation)
- Re-evaluated the budget breakdown by quarter.
- Prepared updated budget summaries by various categories for internal budget tracking/evaluation.
- Updated work plans for task activities.
- Maintained a central project filing system.
- Periodically held project management meetings and also kept the project on track via phone calls.

In addition, CCCSD was presented with an IPM Innovator Award from the California Department of Pesticide Regulation.

Task 2: Expand Partnerships with Stores

We accomplished the following with respect to regional implementation of this task:

- Continued to coordinate with other Bay Area agencies that are implementing IPM Partnerships with stores: Met four times this quarter with the regional IPM Partnership committee. Also coordinated with other agencies via telephone and e-mail.
- Continued work on the training video (which will be used within central Contra Costa and made available to other agencies for the cost of reproduction). Completed the first video in a series of 3, 20-minute videos.
- Worked on the design of evaluation tools for the IPM Partnership with stores.
- Prepared a report outline for each agency to use for its final report (with results to be summarized in a regional final report in early 2000).
- Reviewed three new draft fact sheets (on yellow jackets, slugs and snails, and rose care) funded by the region.

We accomplished the following with respect to task 2 implementation within central Contra Costa County:

- Periodically met with the participating stores within central Contra Costa County to check on the store displays and restock fact sheets as needed.
- Updated the summary of publicity efforts.
- Met with representatives from participating Ace Hardware stores on 10/6/99 to obtain

- feedback on the Partnership to date.
- Met with representatives from Navlet's Garden Center to obtain feedback on the Partnership to date.
- Provided written evaluation forms to participating stores as part of a regional effort to obtain store employee comments.
- Requested sales data from several participating stores as part of a regional effort to evaluate the project in terms of product sales.

Task 3: Partnerships with Master Gardeners

Participating Master Gardeners conveyed information about less-toxic pest control. Specifically, they:

- Held two "Less-Toxic Gardening" workshops this quarter, including one at a Camelia Society meeting and one at the Master Gardeners' Office.
- Gave a 45-minute IPM presentation to the Concord Garden Club.
- Gave out information about less-toxic pest control at special events, including the October and November Richmond Farmer's Markets.

CCCSD undertook the following task activities:

- Coordinated with the Master Gardener Program Coordinator and participating Master Gardeners.
- Maintained boxes of workshop materials, and created additional packets of workshop handouts as needed.
- Updated the summary of task publicity.
- Completed a summary of evaluation forms from workshops held through September, 1999.
- Met with participating Master Gardeners on 10/18 to further evaluate the 1999 Partnership.
- Decided what changes to make in 2000 to improve the IPM Partnership with Master Gardeners.
- Drafted a work plan for 2000.

Task 4: IPM Video for the General Public

As noted in prior quarterly reports, we concluded the video we originally planned to buy for this task is not the best way to convey the IPM message and we did not buy that video by the grant's April 1999 deliverable date. CCCSD has now decided we would like to create a new video by editing/adapting the video created under task 2. Then we would reproduce that video and publicize its availability. Because of the additional effort involved in creating a new video, we propose to increase the total task 4 budget from \$10,000 to \$20,000 (\$11,641 of which would be federal funds) by moving \$10,000 (\$5,821 in federal funds) from the total Task 7 budget.

We will need to amend this task to postpone the video acquisition date and to change the task language from video acquisition to video development.

Task 5: IPM Strategies Used by Public Gardens

As discussed with the Bureau of Reclamation over the phone (with a follow-up e-mail), CCCSD plans to push back the task schedule by six months. Therefore, we will identify interested public gardens by June 2000, rather than December 1999, will complete training of garden staff by January 2001, and will complete signage and/or a brochure by May 2001.

Task 6: IPM Training for Pest Control Operators

We accomplished the following with respect to this task:

- Finalized the task work plan in a report entitled "IPM Training for Pest Control Operators."
- Reviewed best management practices (BMPs) for PCOs.
- Issued a request for qualifications for a workshop coordinator.
- Selected a consultant to coordinate the PCO training workshop.
- Selected a training facility and two possible training dates.

Note that the cooperative assistance agreement calls for three IPM workshops. However, CCCSD plans to instead conduct a single IPM workshop at least 3 hours long. We made this change because of feedback from PCOs that it would be better to have one long workshop than 3 short ones. Note that the workshop is being structured so that it can be replicated elsewhere in the Bay Area; a number of agencies have expressed interest in replicating it.

Task 7: "Eco-friendly" Yard Campaign

No work was done on this task, consistent with the schedule. However, CCCSD has new ideas for this task. The intent of task 7 is to provide public outreach about IPM in a way other than through the store and Master Gardener IPM Partnerships. CCCSD no longer feels that an "Eco-friendly" yard campaign would be the best approach. Instead, CCCSD wants to amend task 7 to substitute several public outreach efforts for the eco-friendly yard campaign.

Assuming the Bureau of Reclamation approves this approach, the following outreach efforts would be evaluated and the most promising would be pursued:

- In coordination with San Francisco, prepare an outreach piece for the public (or segment thereof such as restaurants) about what to look for when hiring a PCO.
- Pursue wider distribution of the flea fact sheet such as through several pet stores and/or vets.
- Provide project displays (literature stands with fact sheets) at interested libraries in central Contra Costa.
- Prepare a 20 to 30 minute presentation about water quality and the IPM Partnership and pursue giving this talk to groups such as CalTrout.

The task would be re-named "additional public outreach on IPM."

CCCSD also wants to reduce the level of effort on Task 7 by moving \$15,000 of the current \$39,000 total budget (which includes \$22,700 in federal funds) as follows:

- Move \$5,000 (\$2,913 in federal funds) to task 2 for labor costs related to working with new stores to be added to the IPM Partnership in 2000.
- Move \$10,000 (\$5,821 in federal funds) to task 4 in order to create a new video.

Task 8: Data Monitoring and Evaluation

CCCSD continued to perform monthly effluent toxicity testing and pesticide testing for chlorpyrifos and diazinon. These monitoring efforts are being paid for by CCCSD, outside of the grant.

In addition, CCCSD completed the first Annual Monitoring Report (which was submitted to the Bureau of Reclamation). Time spent on this report was charged to task 1 and to the individual tasks that were evaluated.

Summary of/Status of Deliverables

We are on schedule with respect to the project deliverables for this quarter.

Description of any contract or task order amendments or modifications:

Within two months, we will e-mail you a formal request to amend the assistance agreement. The following summarizes needed amendments (or administrative corrections/adjustments) to the assistance agreement, as described in this or prior quarterly reports:

- 1. Change the task 1 budget to \$28,521 to correct a typo. This amount is the one submitted to CAL-FED (see Form 424A, Figure 2) and results in the correct federal budget total (\$266.000).
- 2. Change the Task 3 deliverable deadline for IPM training workshops from February to April, 1999 (and subsequent years). This change is needed, because the cooperative agreement was not finalized until much later than was assumed when the project timeline was developed.
- 3. Change the task 4 description from "This task includes purchasing 500 copies of an IPM video, distributing the copies to libraries and video stores with central Contra Costa County, and publicizing the availability of the video" to "This task includes creating a video for the public about IPM by editing/adapting the video created under task 2. The task also includes making 500 copies of the IPM video, distributing the copies to libraries and video stores within central Contra Costa County, and publicizing the availability of the video." The first deliverable would become "creation of the video" with a November 2000 deadline. The second deliverable would become "distribution and publicity" and would have a June 2001 deadline. The total task budget would increase from \$10,000 to \$20,000 (\$11,641 of which would be federal funds) by moving \$10,000 (\$5,821 in federal funds) from the total Task 7 budget.
- 4. Change the deadline for the deliverables under Task 5. The first deliverable will be June 2000, the second task deliverable will be January 2001, and the third task deliverable will be May 2001.
- 5. Change the wording of Task 6 part b from "Conduct three IPM workshops...." to "Conduct one IPM workshop, at least 3 hours long..." This change is desired because of feedback from PCOs that it would be better to have one long workshop than 3 short ones. Note that the workshop is being structured so that it can be replicated elsewhere in the Bay Area; a number of agencies have expressed interest in replicating it.
- 6. Change Task 7 from an eco-friendly yard campaign to other public outreach efforts related to IPM. The following outreach efforts would be evaluated and the most promising would be pursued:
 - In coordination with San Francisco, prepare an outreach piece for the public (or segment thereof such as restaurants) about what to look for when hiring a PCO.
 - Pursue wider distribution of the flea fact sheet such as through several pet stores and/or vets.
 - Provide project displays (literature stands with fact sheets) at interested libraries in central Contra Costa.
 - Prepare a 20 to 30 minute presentation about water quality and the IPM Partnership and pursue giving this talk to groups such as CalTrout.

The task would be re-named "additional public outreach on IPM." The total budget would be reduced by \$15,000 from \$39,000 (\$22,700 in federal funds) to \$24,000 (\$13,969 in federal funds).

7. Change the deadline for the public survey in task 8 from May 2000 to June 2001. This survey should be done near the conclusion of the grant, since it is intended to measure project effectiveness. (June 2001 is consistent with the draft Project Evaluation and Monitoring Plan, which was submitted to you 12/7/98 and which indicates the survey will be conducted in the

- spring or early summer of 2001. However, we now expect to conduct the survey in late January, in order to coordinate with the annual survey conducted by the Contra Costa Clean Water Program.)
- 8. Delete Task 8, subtask "f" which states, "In addition, the Contra Costa Clean Water Program will participate in a regional urban creek monitoring program." That item was never included in the assistance agreement funding, and its implementation is beyond CCCSD's control. If the Clean Water Program ends up doing creek monitoring (which no longer appears likely), then we will evaluate the data.
- 9. Modify Task 8, subtask "d" so that it reads, "Measure public awareness with a follow-up survey. Compare results to applicable baseline surveys" rather than "Compare results to the 1994 baseline survey." This change is requested since surveys done by the Contra Costa Clean Water Program appear to provide better reference data than the 1994 survey conducted by CCCSD.

Problems encountered:

We have encountered no substantive problems.

Description of benefits/objectives of project achieved:

Substantial progress has been made in implementing tasks 2 and 3, and task 6 is also substantially underway.

As part of task 2, we have continued to facilitate IPM Partnerships sponsored by a number of Bay Area Agencies.

Needed Action from the Bureau of Reclamation/ CALFED

The following actions are needed from the Bureau of Reclamation and/or CALFED:

- Approval of the amendments to the cooperative agreement, described above. (However, this can wait until we submit a e-mail formally requesting approval.)
- Approval of the Project Evaluation and Monitoring Plan and Quality Assurance Project Plan, which was submitted 12/7/98. (We responded to CALFED comments on the plan in a July 19, 1999 letter to EA Engineering which was also sent to the Bureau of Reclamation).

Enclosure

Video (Part 1 of a 3-part store employee training video)

CALIFORNIA BAY DELTA ENVIRONMENTAL ENHANCEMENT ACT INDIVIDUAL PROJECT PROGRESS REPORT

As of **November 30, 1999**

(December 31, 1999 accounting data not yet available)

Agency: U. S. Bureau of Reclamation

Proposal/Description: IRRIGATION DRAINAGE WATER TREATMENT FOR SELENIUM

REMOVAL: PANOCHE DRAINAGE DISTRICT DEMONSTRATION

FACILITY

USBR Agreement 1425-98-FC-20-16660

CALFED Tracking #98-B14

Funds Provided: \$1,149,000 100% of the Total Funds Provided Funds Obligated: \$1,149,000 100% of the Total Funds Provided

Funds Expended: \$

Costs through November 30, 1999

Labor: \$33,927

Benefits: \$ 7,267 Contracts (AE): \$18,544

Contracts (Const): **zero**

Overhead: \$4,524

Supplies & Expenses: \$7,267

Domestic Travel: \$ 181

Equipment: \$ zero

Physical progress during the quarter/accomplishments:

Task 1: Field Studies

Operational changes and O&M: After increasing the hydraulic loading to the Algal-Bacterial Selenium Removal (ABSR) Systems during the spring and summer, the hydraulic loading to both the Mode 1 and Mode 2 systems was kept constant during Quarter 5 in order to determine the affects of decreasing temperature and sunlight on nitrate and selenium removal. Bacterial substrates and nutrients (molasses, carbon dioxide, fertilizers) were regularly delivered to the site and added to the appropriate reactors within the ABSR Facility. The carbon dioxide flow to the Mode 1 System was reduced to approximately 50 lbs per week in order to maintain pH between 7.5 and 9.0.

Additional water quality probes to measure dissolved oxygen, pH, temperature, and oxidation-reduction potential and cable conduit were installed at the ABSR Facility. We expect them to be fully operational during Quarter 6.

Sampling and analysis: Weekly samples of the influent and effluent of each pond of the ABSR Facility have been collected and analyzed for the concentration of selenate, selenite, nitrate+nitrite nitrogen, and 13 other parameters.

Task 2: Laboratory Studies

Training of two additional selenium analysts has been in progress since October 1999. The routine training will be completed in January.

Additional ABSR system pond sediments were collected on November 12, 1999, and they have been prepared for total acid digestion and subsequent selenium analysis by low-rate drying at 40°C, pulverization, and sieving.

This quarter validation of our laboratory's method of sequential extraction, alkaline digestion, and speciation of selenium from pond sediments has been completed with the analysis of split samples by two different procedures. We determined the level of hydrogen peroxide required to oxidize organic matter in the samples but without interferring with the selenium determination.

Several other selenium analytical methods are being adapted to the organic-rich water and sediments of the ABSR Facility. They are the following: interstitial Se (total soluble selenium in supernatant after centrifuging sediments), selenate and selenite (after water extraction), absorbed Se (selenite after phosphate extraction), and particulate selenium determination:

Task 3: Data and Economic Analyses

In order to form more detailed and reliable cost estimates for construction and operation of full-scale ABSR Facilities, a detailed list of construction materials and quantities was compiled for a one million gallon per day Facility. Unit costs for each item such as hydraulic transfer structures, pipe laying, concrete water line construction, etc. were determined by consulting construction contractors. Engineering design, operation, and price information were gathered for intermittantly-backwashed gravity filters which may be required for final effluent filtration in full-scale systems.

Task 4: Technology Transfer

Another journal article on the ABSR Technology has been drafted and will be finalized and submitted to a journal such as the American Society of Civil Engineers Irrigation and Drainage Journal during Quarter 6.

The project website was maintained at www-esd.lbl.gov/quinn/Grassland_Bypass/RESEARCH/Panoche3.html.

Physical: 40% Complete

Irrigation Drainage Water Treatment for Selenium Removal: Panoche Drainage District Demonstration Facility University of California, Berkeley CALFED Tracking #98-B14 USBR Agreement 1425-98-FC-20-16660

Budget year: FY Quarter: Statement Quarter:

2000

5

IMPORTANT NOTE: Costs as of November 30, 1999 shown.

Accounting information for December 31, 1999 is not yet available.

Total Estimated Cost \$ 1,149,000 Funding from Federal Bay-Delta Account \$ 1,149,000 Project Completion 3 years

		Quarter 1 of FY00 Budget				FY99 Budget		FY00 Budget			FY99 to FY01 Budget		
			Accrued			Accrued	Balance		Accrued	Balance		Accrued	Balance to
		Budget	Expenditure	Variance*	Budget	Expenditure	Remaining	Budget	Expenditure	Remaining	Budget	Expenditure	Complete
Task 1: Field studies (FY 99-FY 01)	_	\$52,931	\$32,000	\$20,931	\$321,500	\$275,582	\$45,918	\$211,724	\$32,000	\$179,724	\$735,899	\$307,582	\$428,317
Percent Work Complete for Task 1	42%												
1.1 Operate ABSR Facility		\$25,931	\$15,000		\$186,000	\$139,212		\$103,724	\$15,000		\$393,448	\$154,212	
1.2 Mass balances		\$24,675	\$15,500		\$126,200	\$131,770		\$98,700	\$15,500		\$323,851	\$147,270	
1.3 not used		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0	
1.4 Bioaccumulation		\$2,325	\$1,500		\$9,300	\$4,600		\$9,300	\$1,500		\$18,600	\$6,100	
Task 2: Laboratory studies (FY99)		\$0	\$3,000	(\$3,000)	\$50,000	\$14,340	\$35,660	\$0	\$3,000	(\$3,000)	\$50,000	\$17,340	\$32,660
Percent Work Complete for Task 2	35%												
Task 3: Data & economic analyses;													
scale-up studies (FY99-FY01)		\$9,575	\$9,000	\$575	\$39,300	\$36,810	\$2,490	\$38,300	\$9,000	\$29,300	\$117,000	\$45,810	\$71,190
Percent Work Complete for Task 3	38%												
3.1 Economic analysis		\$3,850	\$4,000		\$15,400	\$4,400		\$15,400	\$4,000		\$46,300	\$8,400	
3.2 Project management, report writing		\$5,725	\$5,000		\$23,900	\$32,410		\$22,900	\$5,000		\$70,700	\$37,410	
Task 4: Technology transfer activities		\$7,375	\$1,000	\$6,375	\$23,500	\$6,500	\$17,000	\$29,500	\$1,000	\$28,500	\$83,000	\$7,500	\$75,500
with irrigation districts, etc (FY99-FY01)													
Percent Work Complete for Task 4	38%												
Travel, telephone, research management services, and indirect expenses		\$11,561	\$7,445	\$0	\$71,848	\$42,057	\$29,791	\$46,243	\$7,445	\$38,798	\$163,101	\$49,501	\$113,600
PROJECT TOTAL		\$81,442	\$52,445		\$506,148	\$388,360	\$117,788	\$325,767	\$52,445	\$273,322	\$1,149,000	\$440,804	\$708,196

CALIFORNIA BAY-DELTA ENVIRONMENTAL ENHANCEMENT ACT UNITED STATES BUREAU OF RECLAMATION INDIVIDUAL PROJECT PROGRESS REPORT

Contract Number:	1425-99-FC-02-00020					
Agency / Entity Name:	Anderson-Cottonwood Irrigation District					
Proposal Title And/or Description:	Fish Passage and Fish Screening Improvement Projec - Phase II	t				
Funds Provided:	\$813,552					
Funds Obligated:	\$860,000					
Funds Expended:	<u>\$839,484</u>					
	Labor: <u>\$ 2,199</u>					
	Contracts: <u>\$830,000</u>					
	Contracts (Construction): § 0					
	Overhead: § 0					
	Other: <u>\$ 5,010</u>					
Physical progress during bid process.	g the quarter/Accomplishments: Completing design phase and initiating					
Physical 98 % Compl	ete					
Comments:		_				

12/31/99

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Natomas Mutual Water Company American Basin Fish Screen and Habitat Improvement Project Quarterly Report Update to CALFED

For the 1st Quarter of FY2000 Ending December 31, 1999 January 12, 2000

CALFED Contract No. 98-B29

Project Progress Update:

- φ All subcontractors have signed agreements for their Scope and Services.
- φ The extent and location for Biological Assessment have been determined and agreed upon by the Environmental Consultants. Preliminary database research for endangered/threatened species has been completed.
- φ Preliminary hydraulic models have been completed. General conveyance improvements have been identified and are being quantified.

Project Budget Update:

Expenditures This Quarter	\$26,401
CALFED Cost Share	6,348
CALFED Reimbursements Received	0
Expenditures To Date	\$26,401
CALFED Cost Share	6,348
CALFED Reimbursements Received	0
CALFED Funds Remaining	\$200,000
Percent Completion	3%

Natomas Mutual Water Company American Basin Fish Screen and Habitat Improvement Project

Budget/Expenditures Summary

CALFED Contract No. 98-B29

	Cor	tract Amou	unt	Actua	I Expenditu	ıres	Remainir	ng/(Over) l	Budget	1st C	uarter FY 2	2000
Phase Description	CALFED	BUREAU	TOTAL	CALFED	BUREAU	TOTAL	CALFED	BUREAU	TOTAL	CALFED	BUREAU	TOTAL
Phase I - Feasibility Study and E	Biological A	ssessmer	nt									
Obtain Site Specific Data	25,000	15,000	40,000	589	589	1,178	24,411	14,411	38,823	589	589	1,178
Evaluation of Alternatives	30,000	30,000	60,000	3,715	3,715	7,430	26,285	26,285	52,570	3,715	3,715	7,430
Biological Resource Studies	35,000	0	35,000	2,044	0	2,044	32,956	0	32,956	2,044	0	2,044
Water Demands	0	10,000	10,000	0	3,208	3,208	0	6,792	6,792	0	3,208	3,208
Coordination and Meetings	0	15,000	15,000	0	3,388	3,388	0	11,612	11,612	0	3,388	3,388
Legal and Administration	0	10,000	10,000	0	9,154	9,154	0	846	846	0	9,154	9,154
Total Phase I	90,000	80,000	170,000	6,348	20,054	26,401	83,652	59,947	143,599	6,348	20,054	26,401
Phase II - Preliminary Design an	 d Environn 	nental Dod	umentati	on 								
Preliminary Design	52,500	52,500	105,000	0	0	0	52,500	52,500	105,000	0	0	0
Environmental Documentation	57,500	57,500	115,000	0	0	0	57,500	57,500	115,000	0	0	0
Water Rights	0	25,000	25,000	0	0	0	0	25,000	25,000	0	0	0
Coordination and Meetings	0	15,000	15,000	0	0	0	0	15,000	15,000	0	0	0
Legal and Administration	0	20,000	20,000	0	0	0	0	20,000	20,000	0	0	0
Total Phase II	110,000	170,000	280,000	0	0	0	110,000	170,000	280,000	0	0	0

 Phase I and II Totals:
 200,000
 250,000
 450,000
 6,348
 20,054
 26,401
 193,652
 229,947
 423,599
 6,348
 20,054
 26,401

 Percent of Contract Amount:
 100%
 100%
 3%
 8%
 6%
 97%
 92%
 94%
 3%
 8%
 6%

Prepared by:Ensign & Buckley Prepared on: January 10, 2000

I. **Project Title:** Water Challenge 2010

Contract No. 98-AA-20-0032

CALFED No. 98-B39 POC: Nancy Rogers

CALFED Recommended Level of Funding:	\$64,500
Funds Obligated Through December 31,1999:	\$64,500
Funds Expended Through December 31,1999:	\$3,000

Funding provided to: USBR agreement signed with COE on March 4, 1999. **Project Description:** This project will result in the design and construction of an interactive, hands-on exhibit that will travel to venues throughout California to provide a fast, effective, and enticing way for people to grasp the essential issues behind Bay-Delta ecosystem restoration and other aspects of the CALFED mission. The exhibit will allow visitors to personally manage Sacramento-San Joaquin Delta water for ecosystem restoration and other beneficial uses. Visitors will be challenged to try their hand at apportioning water flowing from an elevated tank (representing the total amount of water flowing from the Sierras into the Bay-Delta watershed), into a series of three smaller tanks (representing the water needs of fish and wildlife, cities and industry, and agriculture/food production). As they make their water allocation decisions, visitors will receive immediate feedback on the consequences of their actions via video monitors that will be built into the exhibit.

Completion Date: December 31, 2000.

First Quarter Accomplishments: Technical research has been completed on the exhibit design, engineering and content; and a scope of work was developed to solicit for an RFP. Contract award is anticipated in the second quarter of FY 2000.

CALIFORNIA BAY-DELTA ENVIRONMENTAL ENHANCEMENT ACT USBR INDIVIDUAL PROJECT PROGRESS REPORT

As of: December 31, 1999

Agency: Anderson-Cottonwood Irrigation District

Proposal/Description: Fish Passage and Fish Screening Project – Phase III

Funds Provided: \$ 2,966 100 % of the Total Funds Provided

Funds Obligated: \$5,100,000 <1 % of the Total Funds Provided

Funds Expended: \$ 588,214

Labor: \$ 4,470

Contracts (AE): \$ 91,181

Contracts (Construction): \$ 492,563

Overhead: \$ 0

Other: \$ 0

Physical progress during the quarter/Accomplishments:

The excavation for the fish screen and staging area are complete; the access road is 90% complete; and the foundation is 80% complete.

Physical 13 % Complete

Comments: November 1, 1999, Homer J. Olsen, Inc., was given Notice to Proceed. The dry winter has been helpful in doing foundation work.

 $(I:\ Contract\ STANDRDS\ REPORTS\ ATTACH-A.WPD)$

Project Title: Water Challenge 2010 Exhibit, Phases III & IV

Contract No. 98-AA-20-0032/001

CALFED No. 99-B22 POC: Nancy Rogers

CALFED Recommended Level of Funding: \$50,500

Funding provided to: USBR agreement signed with COE on December 10, 1999. **Project Description:** CALFED recommends funding Phases III (Exhibit Fabrication) and Phase IV (Installation) of this project, a traveling environmental education exhibit titled "Water Challenge 2010." This interactive, hands-on exhibit motivates visitors to learn more about the complex issues of the Bay-Delta by providing them with the experience of personally managing Sacramento-San Joaquin Delta water for ecosystem restoration and other beneficial uses. Visitors are challenged to try their hand at apportioning water flowing from a huge elevated tank (representing the total amount of water flowing from the Sierras into the Bay-Delta watershed) into a series of three smaller tanks (representing the water needs of fish and wildlife, cities and industry, and agriculture/food production). As they make their water allocation decisions, visitors receive immediate feedback on the consequences of their actions via video monitors built into the exhibit. COE will fund the Phase V (Evaluation & Monitoring) and Phase VI (Engineering & Software Refinement) portions of the project. Other agencies and organizations have indicated interest in funding and/or installing duplicate versions of the exhibit (Phases VII and VIII).

Completion Date: April 30, 2001.

First Quarter Accomplishments: Agreement signed. RFP submitted in January 2000.

January 10, 2000

Roger C. Simpson Grants and Cooperative Agreements Officer U.S. Bureau of Reclamation Mid-Pacific Regional Office 2800 Cottage Way Scaramento, Ca 95825-1898

Re: Cooperative Agreement No. 99FC200234

CALFED No. 99-B08

Dear Mr. Simpson:

Enclosed is the second quarterly report to the U.S. Bureau of Reclamation and CALFED for the San Joaquin River Pilot Project. In addition, these reports have been faxed and emailed to Ms. Nan Yoder (nyoder@mp.usbr.gov). If you have any questions, please do not hesitate to call.

Very truly yours,

Richard M. Moss General Manager

Enclosures

cc: Nan Yoder, U.S. Bureau of Reclamation
Hal Candee, Natural Resources Defense Council
David Behar, Natural Resources Defense Council
Ronald D. Jacobsma, Friant Water Users Authority

CALFED

CALIFORNIA BAY DELTA ENVIRONMENTAL ENHANCEMENT ACT USBR INDIVIDUAL PROJECT PROGRESS REPORT

As of: **December 31, 1999**

Agency:	Friant Water Users Authorit	y
Proposal/Descriptio	n: Proposal for water exchange	to benefit riparian
	Vegetation along the San Joa	quin River
Funds provided:	<u>\$ 2,500,000.00</u>	% of the Total Funds Provided
Funds Obligated:	<u>\$ 2,500,000.00</u>	% of the Total Funds Provided
Funds Expended:	<u>\$1,616,109.95</u>	
	Labor:	<u>67,361.78</u>
	Contracts (AE):	<u>43,499.13</u>
	Contracts (Const):	<u>21,060.58</u>
	Overhead:	<u>33,680.90</u>
	Other:	<u>1,450,507.56</u>
Physical progress d	uring the quarter/Accomplishmen	ts:
the Friant Dam do 12,000 a.f. of this v purchases and deli 10,000 a.f. water ex in October and No monitoring well in October, when the vegetation establish monitoring wells w elevations stabilize technical team has	wan the San Joaquin River (comvater is yet to be returned to the veries totaling 15,000 a.f. have been been such and with Westlands Water exember). All the vegetation san stallation was completed. Flow y were terminated. A modeling hment on channel conveyance covere sampled once a week through. A summary of the program had two meetings and data college.	ater (32,276 a.f.) had been released from apleted September 30, 1999). About a Friant Division. However, Loss Water been completed (assuming crediting for a District and Madera Irrigation District appling was completed. All of the measurements were continued until 14 a study of the potential effects of apacity was initiated. Groundwater gh December, when the groundwater status is detailed in Attachment 1. The lation and coordination of the analyses a budget comparisons are delineated in
Physical%	Complete	
Comments:		

ATTACHMENT 1

QUARTERLY REPORT/JANUARY 2000 CALIFORNIA BAY DELTA ENVIRONMENTA ENHANCEMENT ACT COOPERATIVE AGREEMENT 99FC200234 PILOT PROJECT TO BENEFIT RIPARIAN VEGETATION ALONG THE SAN JOAQUIN RIVER

The following is a report summarizing the activities of the Pilot Project to Benefit Riparian Vegetation Along the San Joaquin River (Pilot Project) for the second quarter (October through December, 1999). The project activities are in furtherance of the cooperative agreement with CALFED for the Pilot Project to benefit riparian vegetation along the upper mainstem of the San Joaquin River. The Friant Water Users Authority (FWUA) compiled this report. Any questions about this report should be directed to Mr. Richard M. Moss, General Manager, Friant Water Users Authority, 854 North Harvard, Lindsay, California, 93247, (559) 562-6305.

Riparian Vegetation Monitoring Program – The following work was coordinated principally by Ms. Marcia Wolfe, Biologist for the FWUA and performed by contract staff, the Department of Water Resources, Jones and Stokes and the U.S. Bureau of Reclamation.

- Collated tree seed maturation and release field data and averaged data by species and by location. Seed release on all the sampled species occurred across a relatively long period, from May through August, with the primary exception of cottonwood, much of which had matured by the time the project was initiated. There are very few sycamores along the river, particularly in Stretch 2, so none were measured. These will need to be identified and monitored next year if it is to be a target species for the purposes of encouraging regeneration with water releases.
- Plotted seed maturation and release data for each species and each regular sample location.
- Continued willow, cottonwood and sycamore literature search on ecology and ecophysiology, including germination, seed production, growth and establishment.
- Began preparation of a photographic record for the final report.
- Continued to coordinate vegetation monitoring with the Department of Water Resources personnel under separate contract. DWR completed the field sampling as designed by Jones and Stokes. GPS locations were obtained for the vegetation transects and were correlated with the well and piezometer locations.
- Entered all vegetation sampling into a computer database in preparation for analysis.

- Reviewed sampling methodologies and shortcomings among the technical team. To eliminate some of the anticipated inadequacies in the data, a contract was let to Jones and Stokes. Jones and Stokes initiated a qualitative review of Reach 2 to identify areas of willow regeneration and to develop answers for some of the sampling questions identified. Analysis demonstrated that willow seedling height cannot be used to determine age. Jones and Stokes report is pending.
- Held a review by the technical monitoring team to discuss remaining data needs, information gaps and data analysis coordination for preparation of the final report.

Physical Processes Monitoring Program – The following efforts were coordinated principally by Ms. Marcia Wolfe, Biologist for the FWUA and performed by FWUA staff, FWUA contractor, M.H. Wolfe and Associates Environmental Consulting Inc., The Natural Heritage Institute and U.S. Bureau of Reclamation staff.

- Completed drilling and developing the last seven monitoring wells. Monitored well and piezometer levels on a weekly basis until the well elevations stabilized. This occurred during the last two weeks of December 1999, when the monitoring was terminated. Some of the well elevations actually rose sporadically following the termination of the River releases. The reason(s) for this are still unknown. The groundwater elevations sampled from each well were plotted. (See Attachment 1, Appendix 1)
- Completed well drilling and development. Drafted the field log data.
- Prepared well logs for each of the 13 wells and submitted to the Department of Water Resources in coordination with Twining Laboratories. Analysis of drill log data was initiated by FWUA staff.
- Delivered and obtained the analyses of the bulk samples taken from the River bottom during the flow measurements and development of the cross sections.
- Prepared and submitted the formal lease application for the installation and operation of the wells and piezometers to the State Lands Commission. Obtained the official letter of completion for the application and a draft contract for reimbursement to review.
- Submitted the notice of completion of the well drilling as required by the permits to the State Reclamation Board.
- Inspected the wells for compliance and identified several minor deficiencies that needed correction. Coordinated resolution with FWUA O&M and Water Operations Departments.
- Obtained measurements to help calculate vertical controls for the monitoring wells. Prepared monumented cross sections at each vegetation monitoring and

piezometer station and tied the monument elevations to the piezometer and hydrographic measurement station whenever possible.

- Initiated preparation and submittal of well monitoring reports to one of the landowners per the well access agreement.
- Coordinated a civil survey for the remaining six groundwater wells. Installed protective steel barriers around the well casings.
- Obtained GPS and confirmed locations for each of the 13 wells. These were plotted by the U.S. Bureau of Reclamation on the GIS layers.
- Determined the correct river milepost for each study location from actual map measurements. This information will be used for the official site locations and distributed to technical team members.
- Initiated a contract with Mussetter Engineering to evaluate the future potential impacts of the establishment of riparian vegetation in the channel on roughness and channel capacity. The work has been about 30 percent completed on this model.

Pilot Project Flow Release Program – The Pilot Project releases from Friant Dam were terminated on 30 September, 1999, when it was agreed that all the Friant releases from that point on were to meet downstream water obligations. Because of the travel time between Friant Dam and Mendota Pool, Pilot Project water was still arriving at Mendota Pool through 7 October 1999. As of 8 October 1999, there were no longer credits applied to Pilot Project water at Mendota Pool. The day-to-day evaluation of the needed flows was coordinated by Mr. Peter Vorster of the Bay Institute, Tony Buelna of the U.S. Bureau of Reclamation, Fresno Office and Richard Moss of the FWUA. Mr. Doug DeFlitch, Water Resources Technician for the FWUA, oversaw accounting and web page maintenance.

Flow Measurements - Friant Water Users Authority staff continued to monitor the flows at various locations along the San Joaquin River (see Attachment 1, Appendices 2 and 3). Kevin Couch, Operations Supervisor, headed up this work for the FWUA.

- Terminated flow measurements on 14 October 1999. A consistent increase in downstream flows compared to upstream flows was documented throughout the study between River Miles 222 and 220, respectively.
- Completed plotting of about 2/3 of the cross section with flow data, and stage information. Data analysis was initiated.

Exchange of Water Program – As provided for under the framework agreement that detailed U.S. Bureau of Reclamation concurrence in the implementation of this project, water releases made under this project which flowed all of the way to Mendota Pool were credited against an exchange of CVP supply pumped at the Tracy Pumping Plant for return to the Friant Division service area. Exchange Pilot Project water (water reaching Mendota Pool) was calculated at

25,052 a.f., of which approximately 12,000 a.f. have yet to be returned to the Friant Division. Richard Moss, General Manager of the FWUA, continued to facilitate and implement agreements to wheel exchange and loss water back to Friant water contractors (see Attachment 1, Appendix 4). These activities included:

- Worked with the U.S. Bureau of Reclamation, Friant Contractors, Kings River water contractors, Westlands Water district and others to facilitate water exchanges in an effort to reduce costs and wheel water;
- Coordinated use of the State Water Project for wheeling exchange water;
- Installed, operated and ultimately removed temporary pumps used to convey return water into the Friant-Kern Canal from the Cross Valley Canal near the Kern River; and
- Conducted accounting for returned water credits.

Purchase of Loss Water Program – The Pilot Project water losses had to be replaced in order to keep those entities providing water for new San Joaquin River flows whole from a water supply standpoint (defined in the Framework Agreement as "Loss Water"). Loss water is now estimated to be just under 8,000 a.f. It is believed that Loss Water has all been delivered as of 31 December 1999, however, final crediting of Loss Water exchange with Westlands Water District is still pending (see Attachment 1, Appendix 4).

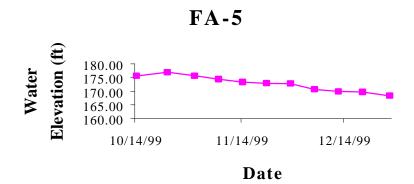
Program Accounting and Management – The Friant Water Users Authority continued to manage the contractual and financial matters for the Pilot Project (see Attachment 1, Appendix 3). The overall management of the Pilot Project has been jointly effected by Hal Candee and David Behar of the Natural Resources Defense Council and by Richard Moss and the staff of the Friant Water Users Authority.

Attachment 1, Appendix 1: Sample Well Data

Well # FA-5

Well Elevation at top of PVC casing _______186.62

Date	Depth (ft)	Water Elevation (ft)
10/14/99	11.00	175.62
10/23/99	9.69	176.93
10/31/99	10.95	175.67
11/07/99	12.21	174.41
11/14/99	13.26	173.36
11/21/99	13.68	172.94
11/28/99	13.81	172.81
12/05/99	15.95	170.67
12/12/99	16.70	169.92
12/19/99	16.86	169.76
12/27/99	18.27	168.35



Attachment 1, Appendix 2: Measured Flows

FRIANT WATER USERS AUTHORITY Operations Department

SJR Measured Flows

Date	Friant Release (cfs)	MP 234 (cfs)	Change in cfs	MP 229 (cfs)	Change in cfs	MP 222 (cfs)	Change in cfs	MP 220 (cfs)	Change in cfs	MP 2 (cf
Date	rtcicuse (013)	(013)	111 013	(013)	111 013	(013)	111 013	(013)	111 013	(0)
6/14-15/1999	158	124.39	12.11	136.50	(92.01)	44.49	(5.95)	38.54	(8.47)	
6/21-23/1999	1000	854.81	7.30	862.11	(9.42)	852.69	(205.87)	646.82	(195.93)	4
7/6-7/1999	600	489.24		Site dropped				257.85	(33.29)	2
7/12-13/1999	550	571.14				505.80	96.25	602.05	(162.01)	4
7/15-16/1999	500	556.73				442.90	64.17	507.07	(87.36)	4
7/21-22/1999	400	561.07				377.99	56.74	434.73	(70.91)	3
7/28/1999	300	350.21				259.85	21.25	281.10		n/ı
8/10-11/1999	135	254.00				185.99	10.93	196.92	(36.39)	1
8/30/1999	100	226.75				137.81	27.98	165.79	(40.44)	1
9/14-15/1999	25	115.53				44.68	9.95	54.63		<u>n/ı</u>
10/7/1999	30	153.83				37.20		n/m		
10/14/1999	30	89.04								

Notes: 1. Little assurance regarding increase in flows between 234/229. 234 site moved on 7/6/99.

^{2.} Note constant increase in flows between sites 222/220 from 7/12/99 forward.

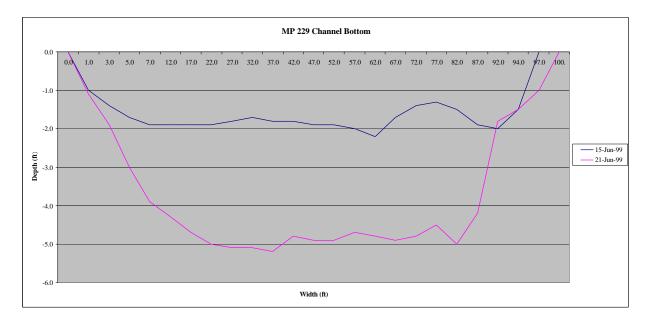
Attachment 1, Appendix 3: Sample Flow Measurement and Cross Section Data

FRIANT WATER USERS AUTHORITY

Operations Department

Location: U/S Lake Ave.

	Distance	Change in Distance	Depth @ Station	Velocity @ Station		Distance	Change in Distance	Depth @ Station	Velocity @ Station
Date	(ft)	(ft)	(ft)	(ft/sec)	Date	(ft)	(ft)	(ft)	(ft/sec)
15-Jun-99	1.0	0.0	0.0	0.00	21-Jun-99	1.0	0.0	0.0	0.00
	3.0	2.0	-1.0	0.00		2.0	1.0	-1.1	0.00
	5.0	4.0	-1.4	0.19		4.0	3.0	-1.9	0.00
	7.0	6.0	-1.7	0.70		6.0	5.0	-3.0	0.31
	9.0	8.0	-1.9	0.86		8.0	7.0	-3.9	1.49
	11.0	10.0	-1.9	0.48		13.0	12.0	-4.3	1.71
	13.0	12.0	-1.9	1.03		18.0	17.0	-4.7	1.41
	15.0	14.0	-1.9	0.86		23.0	22.0	-5.0	2.27
	20.0	19.0	-1.8	1.11		28.0	27.0	-5.1	2.38
	25.0	24.0	-1.7	1.35		33.0	32.0	-5.1	2.75
	30.0	29.0	-1.8	1.54		38.0	37.0	-5.2	2.33
	35.0	34.0	-1.8	1.62		43.0	42.0	-4.8	2.23
	40.0	39.0	-1.9	1.38		48.0	47.0	-4.9	2.44
	45.0	44.0	-1.9	1.54		53.0	52.0	-4.9	2.44
	50.0	49.0	-2.0	1.35		58.0	57.0	-4.7	2.23
	55.0	54.0	-2.2	1.21		63.0	62.0	-4.8	2.19
	60.0	59.0	-1.7	0.86		68.0	67.0	-4.9	2.28
	65.0	64.0	-1.4	0.52		73.0	72.0	-4.8	2.22
	70.0	69.0	-1.3	0.34		78.0	77.0	-4.5	2.09
	74.0	73.0	-1.5	0.22		83.0	82.0	-5.0	1.93
	76.0	75.0	-1.9	0.15		88.0	87.0	-4.2	1.62
	78.0	77.0	-2.0	0.00		93.0	92.0	-1.8	0.54
	80.0	79.0	-1.5	0.00		95.0	94.0	-1.5	0.53
	83.0	82.0	0.0	0.00		98.0	97.0	-1.0	0.00
						101.0	100.0	0	0.00



Attachment 1, Appendix 2: Measured Flows

FRIANT WATER USERS AUTHORITY

Operations Department

SJR Measured Flows

Date	Friant Release (cfs)	MP 234 (cfs)	Change in cfs	MP 229 (cfs)	Change in cfs	MP 222 (cfs)	Change in cfs	MP 220 (cfs)	Change in cfs	MP 217 (cfs)	Change in cfs	Bifurcation (cfs)	
		,,,,		(6.0)		10.01		10.07		10.07		(3.3)	,
6/14-15/1999	158	124.39	12.11	136.50	(92.01)	44.49	(5.95)	38.54	(8.47)	30.07	(30.07)		
6/21-23/1999	1000	854.81	7.30	862.11	(9.42)	852.69	(205.87)	646.82	(195.93)	450.89	(139.46)	311.43	i
7/6-7/1999	600	489.24		Site dropped				257.85	(33.29)	224.56	(29.71)	194.85	
7/12-13/1999	550	571.14				505.80	96.25	602.05	(162.01)	440.04	(16.69)	423.35	
7/15-16/1999	500	556.73				442.90	64.17	507.07	(87.36)	419.71	(39.14)	380.57	
7/21-22/1999	400	561.07				377.99	56.74	434.73	(70.91)	363.82	(45.78)	318.04	
7/28/1999	300	350.21				259.85	21.25	281.10		n/m		222.39	ı
8/10-11/1999	135	254.00				185.99	10.93	196.92	(36.39)	160.53	(3.48)	157.05	
8/30/1999	100	226.75				137.81	27.98	165.79	(40.44)	125.35	(2.05)	123.30	9/2
9/14-15/1999	25	115.53				44.68	9.95	54.63		n/m		47.36	
10/7/1999	30	153.83				37.20		n/m				n/m	
10/14/1999	30	89.04											

Notes: 1. Little assurance regarding increase in flows between 234/229. 234 site moved on 7/6/99.

^{2.} Note constant increase in flows between sites 222/220 from 7/12/99 forward.

Attachment 2. Cumulative Budget Comparison

FRIANT WATER USERS AUTHORITY - SJR PILOT F THROUGH DECEMBER 1999	PROJECT				
THROUGH DECEMBER 1999			CUMULATIVE	TO DATE INFORMAT	ION
	PROGRAM	CURRENT QUARTER	CUMULATIVE	BUDGET AMOUNT	REMAINING
REVENUES:	BUDGET AMT	REVENUE	REVENUE	REMAINING	ANTICIPATED REVENUES
Revenue	2 500 000 00	1 507 526 26	1 507 527 27	002 462 64	002 462 64
	2,500,000.00	1,507,536.36	1,507,536.36	992,463.64	992,463.64
TOTAL REVENUES	2,500,000.00	1,507,536.36	1,507,536.36	992,463.64	992,463.64
	PROGRAM	CURRENT QUARTER	CUMULATIVE	BUDGET AMOUNT	REMAINING
	BUDGET AMT	EXPENSES	EXPENSES	REMAINING	ANTICIPATED EXPENSES
EXPENSES:					
Monitoring Program	120,000.00			120,000.00	
Analysis, Reports and Misc	126,350.00			126,350.00	
SJR Flow Measurements		1,847.05	24,924.74	(24,924.74)	5,000.00
SJR Ground water measurements		5,305.48	8,742.02	(8,742.02)	2,000.00
Ground Water Well Construction		12,565.94	39,450.17	(39,450.17)	8,000.00
Bifurcation Measurement Station Construction		0.00	17,545.03	(17,545.03)	0.00
Vegetation Monitoring		0.00	513.96	(513.96)	7,500.00
Vegetation Survey		5,217.34	9,344.90	(9,344.90)	7,500.00
Channel Rougness Analysis				0.00	30,000.00
Overhead		10,306.22	54,904.33	(54,904.33)	10,000.00
Subtotal:	246,350.00	35,242.03	155,425.15	90,924.85	70,000.00
SLDMWA Wheeling Charges	165,400.00			165,400.00	181,940.00
SWP/DWR Wheeling Charges (Loss Water)	436,350.00	0.00	233,700.00	202,650.00	0.00
CVC Wheeling Charges	540,000.00	98,410.14	141,684.14	398,315.86	125,000.00
FKC Pump-Back (FWUA costs)	75,000.00	14,273.43	42,198.99	32,801.01	5,500.00
Cross Valley Option	150,000.00	0.00	150,000.00	0.00	0.00
USBR Water Charges	449,400.00	0.00	299,600.00	149,800.00	149,800.00
SWP/DWR Wheeling Charges(Exchange Water)	220,000.00	0.00	43,693.00	176,307.00	55,000.00
Kern River Water Purchase		0.00	375,000.00	(375,000.00)	0.00
CVPIA Friant Surcharge Reimbursement	175,000.00	0.00	151,945.00	23,055.00	23,055.00
Exchange Administration Fee	17,500.00			17,500.00	17,500.00
Friant Power Interference	25,000.00			25,000.00	50,000.00
TOTAL EXPENSES	2,500,000.00	147,925.60	1,593,246.28	906,753.72	677,795.00
NET POSITION	0.00	1,359,610.76	(85,709.92)	85,709.92	314,668.64

3. **Project Title**: Butte Creek Watershed Restoration Implementation <u>SEE UPDATE</u> SUBMITTED BY KAREN BROWN

CALFED Recommended Level of Funding:	\$302,745		
Funds Obligated Through September 30, 1999	\$302,745		
Funds Expended Through September 30, 1999:	\$255,882		

Funding provided to: USBR agreement signed with USFWS on September 13, 1998 **Project Description:** This is a watershed planning, outreach and restoration project to be implemented by the Butte Creek Watershed Conservancy. This project will include watershed planning, an education program, an evaluation of the geomorphology of upper Butte Creek canyon and a road survey in the watershed to identify erosion control sites and potential future erosion control needs. USFWS is working with UCC and the Butte Creek Watershed Conservancy (BCWC) to develop this project.

Completion Date: September 30, 1999

Fourth Quarter Accomplishments: The Assistant Watershed Coordinator continues to perform a full range of office support functions including: basic clerical duties, database maintenance, phone reception, transcription, and mailings. Under the direction and supervision of the Watershed Coordinator, the Assistant Coordinator has facilitated the ongoing development of an Existing Conditions Report and Watershed Management Strategy. The Assistant has coordinated regular monthly Board of Directors meetings and bimonthly Watershed Advisory Committee meetings. Currently, the Assistant Coordinator is working to produce a quarterly Conservancy newsletter and is planning the BCWC Annual Silent Auction Benefit.

For the last several months project staff has been collecting field data in the canyon portion of the study area. Landowner cooperation in this area has facilitated easy entrance to the creek for cross sections, long profiles and pebble counts. Historic information (maps, air photos, CalTrans "bridge books", and other sources) is being used through this process to place current creek conditions in context. Access in the valley section of Butte Creek has been a little difficult, but appears to be running smoothly now. Project staff has generally finalized the collection of historical information for Kondolf and Williams review. Staff has begun to transfer cross-sections developed in the field to Excel spreadsheets. Staff has also completed the task of a photo mosaic of the section of Butte Creek from Hwy 162 up to Skyway. All of this information will be synthesized by the consultant team and project staff into a report that will include recommendations for restoration actions.

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developed in the field to Excel spreadsheets. Staff has also completed the task of a photo mosaic of the section of Butte Creek from Hwy 162 up to Skyway. All of this information will be synthesized by the consultant team and project staff into a report that will include recommendations for restoration actions.

Project staff continued collecting existing data including, maps, air photos, and relevant reports. Project staff had several in-field training sessions with the subcontractor, Meadowbrook Associates. The survey data sheet was field tested and minor revisions were made. The Project staff met with the land manager for the cooperating landowner, Sierra Pacific Industries along with Ken Cowley of Meadowbrook to discuss surveying protocol. Work is continuing on the GIS base map. A highly accurate GPS unit will be used to field check data.

CALFED Recommended Level of Funding: \$125,000

Funding provided to: USBR agreement signed with USFWS on August 13, 1998 Project Description: The Research Foundation of CSUC and the Butte Creek Watershed Conservancy are engaged in a long-range watershed management planning effort for Butte Creek in cooperation with landowners, water users, agricultural interests, conservation groups and state and federal agencies under the supervision of the Department of Geography and Planning at CSUC. Protection of critical habitat for the endangered spring-run chinook salmon and steelhead trout populations of Butte Creek is a high-priority for all the agencies working on anadromous fisheries. The purchase of 146 acres of land, with 1.5 miles of creek frontage, would provide an opportunity to develop and demonstrate methods of channel and floodplain management that would help stabilize the sediment and bedload input from the remains of the gravel mining operation. Development of a natural floodplain could have tremendous implications for riparian plant species and help to cool the stream, filter urban runoff, capture large woody debris and increase the water storage and groundwater recharge capabilities of lower Butte Creek. Funding for this project has been provided through DWR, the State's Proposition 204 and the Bay-Delta Act appropriations account (total project cost is estimated to be \$547,068).

Project Completed: Parcel of land known as the McAmis property has been purchased and the USFWS has received a copy of the Short Form Deed of Trust and Assignment of Rents from the Butte Creek Watershed Conservancy. This property will be used to develop a Riparian Restoration Research Preserve.

L. **Project Title:** Lower Mill Creek Riparian Restoration

CALFED Recommended Level of Funding: \$30,000

Funding provided to: USBR agreement signed with USFWS on August 13, 1998 **Project Description:** The proposed project will restore and enhance native riparian vegetation on one or more parcels along lower Mill Creek, a high-priority tributary of the upper Sacramento River. The project will focus on one or more identified gaps in existing riparian habitat along lower Mill Creek and will contribute toward the long-range goal of restoring a continuous corridor of native riparian vegetation.

The Mill Creek Conservancy and TNC will coordinate project implementation with the landowner, teachers and students from the Los Molinos High School and the Mill Creek Watershed Advisory committee. Specific tasks will include planting native shrubs and trees adjacent to existing vegetation to fill gaps in the riparian corridor, controlling invasive nonnative plants and monitoring plant survival and water temperature. Funding for this project has been provided through the State's Proposition 204, the Bay-Delta Act and other local districts (total project cost is estimated to be \$238,000).

Completion Date: April 28, 2001

First Quarter Accomplishments: Completed and submitted planting plan to Mill Creek Conservancy July 1999; awaiting billing from The Nature Conservancy. Assisted in the preproduction and distribution of geomorphology report to develop a monitoring plan. Contract approved to start work on interpretation of aerial data in digital format. Los Molinos High School and Chico State have been contracted to propagate native seeds that are collected this fall and have submitted revised scope of work for the contract modification.

Project Title: Tuolumne River Setback Levees <u>SEE UPDATE PROVIDED BY KAREN BROWN</u>

Contract Number 1425-98-AA-20-17470-2 CALFED No. 98-F06 POC:

CALFED Recommended Level of Funding:	\$655,000
Funds Obligated Through September 30, 1999	\$655,000
Funds Expended Through September 30, 1999:	\$0

Funding Provided to: USBR agreement signed with USFWS on September 13, 1998 **Project Description**: This project is designed to restore and protect fall-run chinook salmon habitat on the Tuolumne River affected by flooding and gravel mining operations within the floodplain by creating 1,450 linear feet of setback levees, moving 3,000 linear feet of levees and regrading and revegetating 561,400 square feet of floodplain. It is designed to restore the Mining 7/11 Reach (river mile 37.7 to 40.3) to a more natural channel morphology. This project was identified by the Integration Panel as having a high priority and was selected by both the stakeholder groups and the Policy Group as a directed action. Funding sources for this project include: (1) USFWS Anadromous Fish Restoration Program - \$2,855,800; (2) USBR Bay-Delta Program - \$655,000; (3) CALFED Category III Program - \$2,801,000; and (4) the Turlock and Modesto Irrigation Districts - \$50,000.

Completion Date: September 30, 2001

Fourth Quarter Accomplishments: Environmental permitting and documentation, funded by AFRP and the Turlock and Modesto Irrigation Districts, including NEPA/CEQA and ESA compliance has been completed. Two years of pre-project fisheries, riparian and geomorphic monitoring have been completed under the AFRP agreement. A 1998 project monitoring report is finished. Design work is 90 percent complete and construction is now expected to occur in late fall of 1999. Final details on conservation easements and contaminants surveys still need to be completed before construction proceeds.

Several project modifications to the project design have been approved by the Ecosystem Roundtable Amendments Subcommittee. An increase in project cost of \$707,000 has also been presented to, and conditionally approved by, the Amendments Subcommittee. Final approval of this request must be made by the CALFED Policy Group. The proponent has been unsuccessful in obtaining funding from other program sources for this increased effort. Funding from the Bay Delta Act appropriation will not be expended until construction begins.

I. Project Title: Grayson River Ranch Perpetual Conservation Easement and Restoration

CALFED Recommended Level of Funding: \$732,000

Funding provided to: USFWS agreement signed with East Stanislaus RCD and the Friends of the Tuolumne River on January 8, 1999

Project Description: Funds provided through this agreement are to complete an easement purchase and to fund restoration activities which will restore about 140 acres of riparian forest and floodplain along 1.2 miles of the Tuolumne River. Floodplain restoration in this area will provide downstream flood protection as well as improved fish and wildlife habitat. Riparian habitat restoration will benefit the San Joaquin fall-run chinook salmon that spawn in the Tuolumne River, as well as waterfowl, songbirds, and other riparian species. This project is being implemented in cooperation with the NRCS Wetlands Reserve Program and the USFWS AFRP.

Completion Date: September 30, 2002

First Quarter Accomplishments: A conservation easement providing for the restoration of riparian forests and other habitats on 136 acres of the project area was acquired by the project proponent. The past quarter had three restoration committee meetings. Project objective were established to provide a guide for the direction of the restoration. Engineering design work was produced and reviewed and sent back for modifications. Qualitative fluvial evaluation of the design was performed by consultants. Revegetation planning and design work is in early stages of development. The monitoring plan is being developed and some contractors identified to carry it out. Permitting for the construction phase of the restoration are being investigated. Much of the project planning expense to date has been provided by the NRCS at no cost.

J. Project Title: Hill Slough West Habitat Restoration Demonstration Project, Phase I

CALFED Recommended Level of Funding: \$200,000

Funding provided to: USFWS agreement signed with to CDFG on January 7, 1999 **Project Description:** This project will restore tidal action to approximately 200 acres of seasonal and permanent wetlands in northeastern Suisun Marsh. Implementation will be carried out in four phases (this funding covers only the first phase) over approximately five years. The project is a collaborative effort to restore a transitional gradient from perennial aquatic habitat in Hill Slough to low marsh, high marsh, and upland habitats at higher elevations.

Completion Date: September 30, 2002

First Quarter Accomplishments: A Request for Proposal (RFP) to hire a consultant to conduct a detailed topographic survey and hydrological assessment appeared in the Contracts Register on October 1, 1999. As a result of the RFP, the Department of Fish and Game (DFG) received seven proposals which were evaluated by DFG and Department of Water Resources (DWR) staff. A contractor was selected and the contract is expected to be completed sometime in January or early February.

P. **Project Title:** Rhode Island Floodplain Management & Habitat Conservation

CALFED Recommended Level of Funding: \$25,000

Funding provided to: USFWS agreement signed with CDFG on April 9, 1999

Project Description: Rhode Island, a 67-acre Delta island owned by CDFG, was breached in 1938. There are opportunities for significant improvements to riparian and wetland habitats on the island. In addition, habitat restoration on Rhode Island will provide important information that will help guide future restoration of other small Delta islands. The first phase, including site surveys and the development of an initial restoration plan, is funded through this agreement.

Completion Date: June 30, 2000

First Quarter Accomplishments: Report/project completed. DFG is in processes of

forwarding final billing.

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Completion Date: June 30, 2000

First Quarter Accomplishments: Report/project completed. DFG is in processes of

forwarding final billing.

N. **Project Title:** Merced River Salmon Habitat Enhancement, Phase III

CALFED Recommended Level of Funding: \$2,433,759

Funding provided to: USFWS agreement signed with CDFG on April 19, 1999 **Project Description:** This project will improve conditions for chinook salmon in the Merced River by developing and improving spawning and rearing habitat, and by removing habitat

favored by fish species, including non-native species, that prey on juvenile salmon.

Completion Date: September 30, 2002

First Quarter Accomplishments: Project activities this quarter continue to be project management, environmental documentation and surveys, and preliminary work for the final design and engineering. Long-term easements within and surrounding the site continue to be negotiated. The landowners continue to be supportive of the project. A programmatic EA will be prepared to cover the Robinson Project and related, future projects on the Merced River. A site-specific analysis for the Roginson project will be included in the programmatic document. Earlier, in the planning process, it was thought that the CEQA and NEPA documents for the Robinson project would be kept separate, this is not yet decided.

S. **Project Title:** Stone Lakes National Wildlife Refuge Land Acquisition

CALFED Recommended Level of Funding: \$2,400,000

Funding provided to: USFWS

Project Description: This project will add 555 acres to Stone Lakes National Wildlife Refuge. This property has outstanding potential for both floodplain management and habitat restoration. Tidal and seasonal wetlands, lakes, riparian corridors, and upland habitats will be protected and restored, with benefits to delta smelt, splittail, giant garter snakes, Swainson's hawks, and other fish and wildlife species.

Completion Date: September 30, 2002

First Quarter Accomplishments: In November, this grant was amended to allow the Service to utilize the American Land Conservancy (ACL) to assist in the acquisition of the 555 acre Kuhn property and to provide additional funds to cover the purchase, initial restoration planning and administrative costs associated with this acquisition. The revised grant amount is \$2,400,000, increased by \$500,000. The Service, in conjunction with ACL and Wildlands, Inc (the option holder on the property) are in the process of completing the appraisals and necessary paper work to complete this acquisition. It is the intent of all parties involved to finalize this transaction by the first of February, 2000.

O. **Project Title:** Petaluma Marsh Expansion Project - Marin County

CALFED Recommended Level of Funding: \$352,135

Funding provided to: USFWS agreement signed with the Marin Audubon Society on January 7, 1999

Project Description: This project will restore and permanently protect 181.46 acres of tidal marshland. Of this acreage, 109.72 acres of previously diked marshland will be restored to tidal marsh status. Upon completion of the acquisition and restoration, the site will be transferred to CDFG. This site will become part of the 2000-acre Petaluma Marsh, the largest undiked tidal marsh remaining in San Francisco Bay. The project will benefit a number of fish species as well as salt marsh residents like California clapper rails and San Pablo song sparrows, among other migratory songbirds and waterbirds.

Completion Date: September 30, 2002

First Quarter Accomplishments: On the ground activity has not yet progressed. Based on the Interagency Agreement between Caltrans, the Coastal Conservancy and Department of Fish and Game that was executed last quarter, the Coastal Conservancy prepared an Agreement between the Marin Audubon Society (MAS) and the Coastal Conservancy. MAS is now waiting to receive the document from the Conservancy to sign. This agreement will enable MAS to receive CALTRANS funds through the Conservancy to complete the restoration plan. In addition, MAS has reviewed and submitted comments on the Conservancy's draft Option Agreement for MAS use in acquiring the site from Redwood Landfill, Inc. Review process is taking longer than originally anticipated since CALTRANS is now reviewing all project contracts and agreements.

R. **Project Title:** South Napa River Wetlands Acquisition & Restoration Program

CALFED Recommended Level of Funding: \$431,000

Funding provided to: USFWS agreement signed with the Napa County Land Trust on January 7, 1999

Project Description: This project will restore and permanently protect historical wetlands adjacent to the Napa River near the City of Napa, California. Seventy-seven acres of historical wetlands will be acquired and existing levees modified or removed to restore and enhance the natural tidal wetland functions and benefit delta smelt and other Delta fishes. **Completion Date:** September 30, 2002

First Quarter Accomplishments: The land acquisition process is in progress. The project proponent is working with area landowners to identify willing sellers in the area. The federal and local environmental impact report on this project has been approved. Two very important steps have been completed this quarter: 1) the appraisals have been completed and, 2) offers based on the appraisals have been made to the owners.

K. **Project Title:** Lower Clear Creek Floodway Restoration Project

CALFED Recommended Level of Funding: \$3,559,596

Funding provided tho: USFWS agreement signed with Western Shasta RCD on April 1, 1999

Project Description: This project will restore almost 3 miles (in two reaches) of stream channel and floodplain on public lands along Clear Creek by actively restoring a natural channel and floodplain morphology and revegetating the newly created floodplain with native riparian vegetation. This will provide new spawning habitat for chinook salmon in one of the watersheds with the most opportunities to restore anadromous fish, as well as other benefits to riparian- and floodplain-dependent fish and wildlife.

Completion Date: September 30, 2002

First Quarter Accomplishments: The NEPA/CEQA compliance is complete. Bid documents for Phase 2A are complete. The job has been bid out and the RCD is awaiting permitting to award contract and begin construction. Estimated award date is January 12, 2000. Vegetation cuttings are being placed in cold storage for revegetation of Phase 2A. The monitoring program (geomorphic and revegetation) was originally tied to Phase 3 funding, but will need to begin this year. Continency funds outlined in the budget will be used for this task. Revegetation designs for Phase 2A are in draft form.

G. **Project Title:** Fern-Headreach Tidal Perennial Aquatic & Shaded River Aquatic Conservation Project

CALFED Recommended Level of Funding: \$425,000

Funding provided to: USFWS agreement signed with Thomas Luckey, L & L Farms on April 6, 1999

Project Description: This project, through local acquisition and a conservation easement, will result in the permanent protection of the 168-acre Fern-Headreach Island. This area includes about 28 acres of shaded riverine habitat, and about 140 acres of tidal marsh, and provides important benefits to delta smelt and other delta fishes.

Completion Date: January, 2000

First Quarter Accomplishments: All pre-acquisition requirements were finalized and the Conservation Easement was approved by DFG. Funds to acquire the property were transferred on 1-12-2000. Closure and conveyance of CE is expected to occur by 1-15-2000.

A. **Project Title:** Benicia Waterfront Marsh Restoration, Phase I

CALFED Recommended Level of Funding: \$59,000

Funding provided to: USFWS agreement signed with the City of Benicia on February 3, 1999

Project Description: This project will lead to the restoration of an 8-acre saltwater marsh along the Benicia waterfront. Restoration of this marsh will provide vital habitat for plants, fish and wildlife, while providing opportunities for public education about salt marshes. Only the first phase of the project has been funded.

Completion Date: September 30, 2002

First Quarter Accomplishments: The baseline hydrologic and plant community site analyses were completed. A conceptual restoration plan is complete. Draft engineering drawings are 50% complete.

H. Project Title:

Floodplain Acquisition, Management, and Monitoring on the Sacramento River

CALFED Recommended Level of Funding: \$1,000,000

Funding provided to: USFWS agreement signed with TNC in July 1999.

Project Description: This project provides funds for the acquisition and management of fee title or easement interests on floodplain lands within the Sacramento River Conservation Area between Keswick and Verona. It will protect and improve essential spawning, rearing, and migratory habitat for chinook salmon and other riparian species.

As this is a continuation of an earlier Proposition 204 funded project (#97-N02) preliminary project work had already been completed. TNC proposes to use the funds provided by this project as a portion of the acquisition cost of the Repanich property.

The Repanich property is located along the West bank of the Sacramento River at river mile 216.5, directly across the river from the River Vista Unit of the Sacramento River National Wildlife Refuge. The property consists of two parcels, A and B.

Parcel A (181.03 acres) is within the "inner-river zone", also known as the "150 year meander zone", as those terms are defined by the SB 1086 Draft Restoration Handbook (May 1998). Parcel A is planted to walnuts with associated riparian forest, gravel bar, plus lower Jewett Creek, including its confluence with the Sacramento River.

Parcel B (113.24 acres) is outside of the inner-river zone. Parcel B is planted to walnuts and includes a recently constructed custom home, walnut huller, and shop.

Acquisition of Parcel A is essential to recreating a continuous riparian corridor along the river and reconnecting the river to its traditional floodplain. Parcel B will be purchased with the intent to resell it for continued agricultural and residential use. The relative sizes of Parcels A and B may change after completion of a preserve design and management plan.

The appraised price of Parcel A is approximately \$1,700,000. The appraised price of Parcel B is approximately \$800,000. TNC will request that the 11420-9-J047 funds be applied to the purchase of the Repanich property. The remainder of the purchase price will be funded by interim financing provided by a Program Related Investment from the Packard Foundation. Following completion of a site-specific plan, preserve design and management plan nonessential portions of Parcels A and B will be resold for continued agricultural and residential use with the proceeds of sale used to repay interim financing.

Completion Date: September 30, 2002

First Quarter Accomplishments: On December 15, 1999, TNC closed escrow and took title to both Parcel A and B utilizing borrowed funds from the Packard Foundation. TNC is currently conducting an environmental analysis of both parcels with the objective of determining optimal parcel configurations for conservation objectives. As soon as this analysis is complete, TNC will separately appraise the parcel designated for conservation ownership and will request that the agreement funds by applied to the purchase of that portion of this property. The residual parcel not critical to ecosystem restoration will be sold to a private buyer for continued compatible agricultural production and residual use.

E. **Project Title:** Cosumnes River Acquisition, Restoration, Planning, and Demonstration Project

CALFED Recommended Level of Funding: \$750,000

Funding provided to: USFWS agreement signed with TNC in July 1999.

Project Description: This project will contribute to the acquisition, restoration, and protection of 300 acres of fishery, riparian, and wetland habitats along the lower Cosumnes River floodplain. The project is integrated with ongoing efforts in the Cosumnes watershed, and will benefit fall-run chinook salmon, splittail, other fish species, sandhill cranes, waterfowl, and neotropical migratory birds.

Completion Date: September 30, 2002

First Quarter Accomplishments:. TNC has initiated negotiations for task 1 acquisitions. TNC is focusing on possible acquisition of tracts with high potential for restoration of riparian, wetland, and aquatic habitats along. Each of these acquisitions are being actively negotiated with the respective landowner. Based on passed experience, it is very likely that one project will develop into a binding contract for sale in the next six months.

F. **Project Title:** Deer Creek/Mill Creek Acquisition and Enhancement

CALFED Recommended Level of Funding: \$1,000,000

Funding provided to: USFWS agreement signed with TNC in July 1999.

Project Description: This project will contribute to the acquisition, restoration, and management of almost 2000 acres of critical riparian and floodplain easements along the lower and middle reaches of Deer and Mill creeks. It is part of a comprehensive effort to restore and protect a continuous habitat corridor on the tributary streams of eastern Tehama County. By retiring and restoring flood-prone lands, the project will have important benefits for anadromous fish (including spring-run, fall-run, and late-fall-run chinook salmon and steelhead) and other fish and wildlife.

Completion Date: September 30, 2002

First Quarter Accomplishments: TNC has initiated negotiations for the acquisition of easements on four properties. Negotiations on protecting one property is proceeding more quickly and staff time has been focused on that property.

M. **Project Title:** Lower San Joaquin River Floodplain Protection & Restoration

CALFED Recommended Level of Funding: \$1,100,000

Funding provided to: USFWS

Project Description: This project will result in the acquisition of approximately 303 acres of land within the lower San Joaquin River floodplain and the restoration of riparian and other wetland habitats for the benefit of numerous species including the Aleutian Canada goose, greater sandhill crane, western yellow-billed cockoo, riparian brush rabbit, giant garter snake and western pond turtle.

Completion Date: September 30, 2002

First Quarter Accomplishments: USFWS has completed the appraisals for multiple properties included in the acquisition. NEPA documentation is complete via the Record of Environmental Consideration signed by the California/Nevada Operations Manager on April 20, 1999. On December 22, 199 the Service accepted an option to purchase the fee simple interest in the 211.31 acres of the Aremebel and Rose property. The Service has obligated funds in the amount of \$605,000 towards this acquisition. Once the legal description is completed the Service intends to close n this acquisition. This acquisition is slated to be finalized by the end of February 2000 and will complete the Task D portion of the grant. Tasks A-C and E and F were not funded under the original grant proposal.

B. **Project Title:** Biological Restoration and Monitoring in the Suisun Marsh/North San Francisco Bay Ecological Zone

CALFED Recommended Level of Funding: \$772,667

Funding provided to: USFWS agreement signed with CSUH, on January 4, 1999 **Project Description:** This project will restore about 272 acres of emergent and submerged marshland at 2 sites in the Suisun Bay/North San Francisco Bay ecological zone. This will involve increasing flows between marshes and the adjacent bay at the Tubbs Island setback site and Peyton Slough. In addition to providing important habitat for Delta fish species, the project includes detailed monitoring designed to develop information to improve the success of future restoration actions.

Completion Date: September 30, 2002

First Quarter Accomplishments: Overall monitoring efforts in marshes and soil and plant testing for mercury and lead continues. The sampling sites, including an additional site in a pristine marsh area, span an array of environmental conditions and are allowing for comparisons of plants and animals populations before, during, and after restoration. This restoration/monitoring project is progressing essentially as proposed.

Q. **Project Title:** South Napa River Slough and Floodplain Restoration Project, Phase I

CALFED Recommended Level of Funding: \$1,490,000

Funding provided to: USFWS agreement signed with the City of American Canyon on January 9, 1999

Project Description: The purpose of this project is to restore existing city-owned wastewater treatment ponds to tidal wetlands, acquire and restore adjacent degraded tidal wetlands and create a visitor's viewing area and interpretive program. Phase I is the acquisition of lands from the Port of Oakland. Phase II of this project is described under Project No. 14 in this Section.

Completion Date: September 30, 2002

First Quarter Accomplishments: Completed phase one Environmental Survey by A/E firm and reviewed by Fish & Wildlife Service; arranged for and began vineyard suitability analysis in order to verify property appraisals; began discussions with California Department of Fish and Game regarding division of property. Requested and have received approval for amendment to cover \$35,000 dollars in addition project costs.

D. **Project Title:** Butte Creek Riparian Restoration Demonstration

CALFED Recommended Level of Funding: \$76,348

Funding provided to: USFWS agreement signed with CSUC on February 11, 1999 **Project Description:** This project is designed to demonstrate state-of-the-art stream restoration in the northern Sacramento Valley. In addition to restoring habitat to benefit the species that use the Butte Creek riparian corridor, including spring-run chinook salmon, the project will be developed for educational and recreational purposes.

Completion Date: September 30, 2002

First Quarter Accomplishments: Gates and fences have been replaced to the satisfaction of users. Project staff are organizing planting days for the planting plan approved by the CDFG wildlife biologist. Stipulations are that the area to be planted be considered a "demonstration project" and that the area be visible to the public. The cooperators' sign is almost complete and will be installed near Hwy 99 in accordance with CALTRANS regulations.

6. **Project Title:** Tuolumne River Special Run Pool (SRP) 10 Restoration <u>SEE UPDATE</u> <u>SUBMITTED BY KAREN BROWN</u>

Contract No. 99-AA-20-0226 (Part A)

CALFED No: 99-F01 POC: Karen Brown

CALFED Recommended Level of Funding:	\$165,000
Funds Obligated Through September 30, 1999	\$164,800
Funds Expended Through September 30, 1999:	\$0

Funding provided to: USBR agreement signed with USFWS on September 16, 1999 **Project Description:** The SRP 10 project is part of the Tuolumne River Restoration Project which is designed to restore and protect fall-run chinook salmon habitat on the Tuolumne River affected by flooding and gravel mining operations within the floodplain by rebuilding a 2,100 footlong portion of the channel and floodplain starting at river mile 25.4. This agreement covers the costs of: (1) one additional year of pre-project monitoring for SRP 9 (an adjacent site) and SRP 10; and (2) construction to repair a breached dike between the portion of channel to be restored and a larger off-channel pit that currently harbors salmonid piscavores. Completion of environmental documents, permitting is being done for both SRP 9 and 10 using CVPIA-AFRP funding.

Completion Date: October 30, 2000

Fourth Quarter Accomplishments: Most of the pre-project monitoring work has been completed. Repair of the breeched dike will occur in the summer and fall of 2000 pending completion of environmental permits and documentation. USFWS anticipates entering into subcontracts with the Turlock and Modesto Irrigation Districts, the entities responsible for implementation, during the first quarter of FY 2000.

5. **Project Title:** Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment <u>SEE UPDATE SUBMITTED BY KAREN BROWN</u>

Contract No. 99-AA-20-0226 (Part B)

CALFED No: 99-F02 POC: Karen Brown

CALFED Recommended Level of Funding:	\$3,332,050
Funds Obligated Through September 30, 1999	\$3,332,050
Funds Expended Through September 30, 1999:	\$0

Funding provided to: USBR agreement signed with USFWS on September 16, 1999 **Project Description:** The MJ Ruddy project (construction and revegetation) is part of a larger Mining Reach project that will restore a 6.1 mile length of channel and floodplain on the Tuolumne River, between river mile 34.2 and river 40.3. Project No. 2, the MJ Ruddy Segment, is between river mile 36.5 and 37.6. Restoration of this segment will return a 1.1 mile reach of river to a more natural, dynamic channel morphology to improve, restore and protect instream aquatic habitat and shaded riverine acquatic habitat for San Joaquin fall-run chinook salmon productivity and restore natural hydrological and geomorphic processes. Specifically, up to 3,160 feet of dike will be setback, 7,460 lineal feet of floodplain will be reestablished including 15.4 acres of re-vegetation. Restored floodplain will be protected with perpetual restoration easements. Funding sources for this project include: (1) AFRP - \$3,145,000 over FY 1999 and 2000; (2) Bay-Delta Act - \$3,235,000; and (3) the Turlock and Modesto Irrigation Districts - \$75,000.

Completion Date: March 30, 2002

Fourth Quarter Accomplishments: Much of the environmental documentation and pre-project monitoring has been initiated under an AFRP agreements. USFWS anticipates entering into subcontracts with the Turlock and Modesto Irrigation Districts, the entities responsible for implementation, during the first quarter of FY 2000.

Project Title: McCormack-Williamson Tract's Wildlife - Friendly Levee Management Program

Contract Number: 99-AA-20-0143 (Part B)

CALFED Number: 99-F03

POC: John Thomson

CALFED Recommended Level of Funding:	\$860,778
Funds Obligated Through December 31, 1999	\$860,000
Funds Expended Through December 31, 1999:	\$0

Funding provided to: USBR agreement signed with USFWS on August 20, 1999 **Project Description:** Restoration of this island has the potential to help resolve critical flood-related issues in this area, including identification of levees most in need of reinforcement and alternative planting strategies for levee and island stabilization, while providing important habitat benefits in the north Delta

Completion Date: August 30, 2002

First Quarter Accomplishments: A draft agreement between USFWS and TNC has been written and is being reviewed by Service solicitors and contracts specialist. The agreement is expected to be finalized during the second quarter of FY 2000, to implement this project.

Project Title: McCormack-Williamson Tract Acquisition

Contract Number: 99-AA-20-0143 (Part A)

CALFED Number: 99-F04

POC: Howard Stark (916) 414-6446

CALFED Recommended Level of Funding:	\$5,356,000
Funds Obligated Through December 31, 2000:	\$5,356,000
Funds Expended Through December 31, 2000:	\$5,356,000

Funding provided to: USBR agreement signed with USFWS on August 20, 1999 **Project Description:** The McCormack-Williamson Tract is a critically important property in pursuing ecological restoration of the northern Delta and linking the habitat corridor along the Mokelumne River. Benefits from the acquisition include the protection of farmland, with high seasonal habitat value for sandhill cranes and waterfowl, and wetlands and aquatic species. Acquisition and restoration of the island also has the potential to address and resolve critical flood-related issues in the area.

Project Completed: September 30, 1999 – TNC acquired McCormack-Williamson Tract on September 30, 1999. Since close of escrow, TNC has initiated comprehensive survey of levee conditions and have begun coordinating restoration planning issues with restoration partners.

Project Title: Small Diversion Fish Screens Program DRAFT

Contract No: 99-AA-20-17700 CALFED No. 98-R01

POC: Luana Kiger, NRCS, Davis

CALFED Recommended Level of Funding:	\$900,000
Funds Obligated Through December 31, 1999	\$193,923
Funds Expended Through December 31, 1999:	\$100,259

Funding provided through: USBR agreement signed with NRCS on February 24, 1999 **Project Description:** NRCS oversees an existing CALFED program to promote the installation and use of fish screens on small irrigation diversions. This cooperative effort involves local landowners, NRCS, Farm Services Agency, the Family Water Alliance, CDFG, NMFS and NFWF. The purpose of this program is to allow expansion with additional funding from the Bay-Delta Act appropriation. Expansion of the program will allow NRCS to provide greater Central Valley area coverage; increase the number of landowners receiving technical and financial assistance for fish screen installation; provide additional assistance to landowners for meeting NEPA/CEQA requirements; increase information, education and outreach activities in support of the program; and coordinate project activities within the CALFED program.

Completion Date: September 30, 2001

First Quarter Accomplishments: NRCS has initiated information and education activities and the landowner assistance function of the program through the Family Water Alliance (\$45,000). Emphasis has been on direct assistance to landowners planning fall 1999 fish screen installations. Thus far, three sites have been identified and selected for fall 1999 small diversion fish screens. NEPA documentation for the fall 1999 actions is 85 percent complete and Section 7 ESA consultations with NMFS have been initiated. Currently, NRCS is providing engineering assistance (\$81,843) to complete designs and initiate contracts (\$67,080) for the fall 1999 projects.

4. **Project Title:** Floodplain Easements - Lower Tuolumne and San Joaquin Rivers

Contract Number: 99AA200151

CALFED Project Number: 99-R01/DA-09

POC:Luana Kiger, NRCS Davis

CALFED Recommended Level of Funding:	\$1,545,000
Funds Obligated Through December 31, 1999	\$1,380,468
Funds Expended Through December 31, 1999:	\$0

Funding provided to: USBR agreement signed with NRCS on July 27, 1999 **Project Description:** CALFED is being given the unique opportunity to participate in the USDA Emergency Watershed Protection Program which will allow significant progress toward ecosystem restoration goals while achieving multiple CALFED benefits. This program will convert approximately 1,200 acres of previously cultivated farmland to seasonal wetlands and shaded riverine aquatic habitat through conservation easements. This land use change will provide benefits to important terrestrial and aquatic species including improved habitat, reduced water temperature and stream velocity and improved food resources for migrating and rearing salmonids. In addition, this program will provide important flood control benefits including reduced public risk due to flood damages and increased protection of lives and property. NRCS has committed \$2,814,000 of appropriated funds to this project in addition to the Bay-Delta Act funds.

Completion Date: June 30, 2000

First Quarter Accomplishments: NRCS issued Option Agreement to Purchase Offers (Offers) to 9 landowners; 3 declined and NRCS issued Offers to 4 more landowners on the waiting list in the same stretch of the river. A total of 10 landowners accepted and have signed Option Agreement to Purchase documents. Appraisals have been completed and survey work is ongoing. Escrow proceedings to close on the 10 easements (totaling 1,073 acres) will begin this quarter with completion during the summer quarter. Restoration work will commence as the easements are secured.

10. **Project Title:** Prospect Island Habitat Protection Project

Contract Number: 1425-98-AA-20-17560

CALFED No. POC: Lena Hsia

CALFED Recommended Level of Funding:	\$2,000,000
Funds Obligated Through December 31, 1999:	\$2,000,000
Funds Expended Through December 31, 1999:	\$1,800,000

Funding provided to: USBR agreement signed with COE on September 17, 1998. **Project Description:** COE and DWR are co-sponsors of this project, which is designed to recover loss of the valuable riparian ecosystem on Prospect Island by repairing levees and returning the island to its pre-flood condition. The project scope includes closing the breach in the Port of Sacramento's Miner Slough levee, dewatering the island, sampling the entrapped fish for threatened or endangered species and returning them to the natural waterways, repairing the cross levee breach and armoring the cross levee with riprap. The project will provide a better guarantee that USBR's property will remain dry and not be inundated. These project features will return the island to a stable condition and save the significant riparian communities on the Prospect Island levees.

COE and DWR, are co-sponsors of this project, which is designed to restore 1,300 acres of freshwater tidal marsh and riparian habitat in the Delta. This project would provide beneficial rearing habitat for fry and juvenile chinook salmon; spawning and rearing habitat for resident Delta fish, such as Delta smelt and splittail; and habitat for waterfowl and shorebirds. USFWS will include the project in the proposed North Delta National Wildlife Refuge.

Completion Date: June 30, 2000.

First Quarter Accomplishments: The final repairs of the cross levee breach and armoring the cross levee with riprap has been completed prior to the winter rainy season. We are done with construction and have completed the project.

Program Title: Habitat Restoration/Flood Control Bypasses Program

Contract No. 98-AA-20-17610

CALFED No. 98-A02

POC: Allen Louie "ALouie@spk.usace.army.mil"

CALFED Recommended Level of Funding:	\$1,200,000
Funds Obligated Through December 31, 1999:	\$1,200,000
Funds Expended Through December 31, 1999:	\$27,821

Funding provided to: USBR agreement signed with COE on September 25, 1998. **Project Description:** The current flood control bypasses along the Sacramento River provide seasonally flooded habitat, but also result in the stranding of juvenile salmonids and other Delta fish. This program will evaluate restoration needs and opportunities to improve habitat, reduce stranding and improve connectivity with the Sacramento River and the north Delta. Elements to be evaluated include: (1) improving existing habitats; (2) improving stream flows within the bypasses and their associated sloughs, (3) improving wetland, riparian, slough, agricultural and shaded reverie aquatic habitats, (4) eliminating fish barriers, (5) reducing fish entrainment and stranding, (6) developing wildlife and fisheries friendly levee maintenance programs, (7) developing consensus based plans by implementing pilot projects, (8) developing information on compatibility with the ecology and (9) developing information on bypass characteristics for improvement plans. The proposed actions will be developed to avoid conflicts with existing and future flood control needs. COE will work with CALFED staff to develop this program in accordance with Ecosystem Roundtable and Policy Team requirements.

Completion Date: September 30, 2001.

First Quarter Accomplishments: See detail below.

A. **Project Title:** 1999 PSP Habitat Restoration/Flood Control Bypasses Program

Projects Under Negotiation

CALFED Recommended Level of Funding: \$820,679

Project Description: Through the 1999 PSP, one project was selected and approved for this Program. Negotiations and agreement preparations are underway with the project proponent as follows:

Project	Expected Award Date	Recommended Funding Level	Funding Recipient
Inundation of a Section of the Yolo Bypass to Restore Sacramento Splittail and to Support a Suite of Other Anadromous and Native Species in Dry Years (Phase I: Baseline Monitoring, Alternatives Analysis and Design)	Pending	\$820,679	Natural Heritage Institute of California
Total Under Negotiation		\$820,679	

8. **Project Title:** Prospect Island Monitoring Project

Contract No. 99-AA-20-0248

CALFED No. 99-A02 POC: Allen Louie

CALFED Recommended Level of Funding:	\$915,000
Funds Obligated Through December 31, 1999:	\$912,309
Funds Expended Through December 31, 1999:	\$1,381

Funding provided to: USBR agreement signed with COE on September 28, 1999.

Project Description: The Prospect Island Monitoring Project is necessary to measure the benefits to a variety of aquatic, avian and terrestrial species, including threatened and endangered species such as Delta smelt, Sacramento splittail and Swainson's hawk, which could result from the construction of the Prospect Island Habitat Restoration Project. The Project will restore approximately 1,300 acres of shallow water habitat in the northern Sacramento-San Joaquin Delta, creating shallow water/freshwater emergent marsh, mudflat, shaded riverine aquatic, riparian and upland habitat.

First Quarter Accomplishments: Agreement negotiations between COE and DWR are in progress.